

REMARKS/ARGUMENTS

STATUS OF CLAIMS

In response to the Office Action dated March 19, 2007, claims 1, 2, 10 and 14 have been amended and claims 12 and 13 have been canceled. Claims 1-11 and 14-21 are now active in this application. No Previously Presented matter has been added.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

Claims 10, 11 and 14-21 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In support of this position, the Examiner identifies “the three-dimensional image” “the line” and “the font image” in claim 10 as lacking clear antecedent support. The Examiner also contends that with regard to “making bolder the line of the font image” in claim 10, the definition of the line within the font image is unclear, as well as whether the line is comprised within the border or outer region of the image, or is a character within the image. Finally, the Examiner maintains that with regard to “thinner font line” in claim 14, the definition of the recited font line is unclear.

By this response, claim 10 has been amended to change “at least one three-dimensional images” in the preamble to “at least one three-dimensional image”, change “said two-dimensional image” in line 4 to “a two-dimensional image” and in lines 9-10, change “the line of the font image” to “a line of a font image”.

With regard to the Examiner’s assertion that the definition of the line within the font image is unclear, as well as whether the line is comprised within the border or outer region of the

image, or is a character within the image, it should be noted that what is now recited is “making bolder a line of a font image corresponding to said character information”.

In addition, “font image” is used repeatedly throughout the specification. In this regard, case law precedent has established that an analysis under 35 U.S.C. § 112 begins with a determination of whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity. Claim language is viewed not in a vacuum, but in light of the teachings of the prior art and of the application disclosure as it would be interpreted by one possessing the ordinary level of skill in the art. *In re Johnson*, 558 F.2d 1008, 194 USPQ 187 (CCPA 1977); *In re Moore*, 439 F.2d 1232, 169 USPQ 236 (CCPA 1971).

A decision on whether a claim is invalid under this section of the statute requires a determination of whether those skilled in the art would understand what is claimed when the claim is read in light of the specification, *Seattle Box Co. v Industrial Crating & Packing*, 731 F.2d 381, 385, 221 U.S.P.Q. 568, 574 (Fed. Cir. 1984).

In determining definiteness, no claim may be read apart from and independent from the disclosure on which it is based. *In re Cohn*, 169 U.S.P.Q. 95, 98 (CCPA 1971); *In re Kroekel*, 183 U.S.P.Q. 610, 612 (CCPA 1974):

... claims are not to be considered in a vacuum, "but always in light of the teachings of the prior art and the particular application disclosure as it would be viewed by one possessing the ordinary level of skill in the pertinent art." When considered in light of the prior art and the specification, claims otherwise indefinite may be found reasonably definite.

The Examiner's problems concerning clarity result from the fact that the Examiner is reading claim 10 in a vacuum and not in light of the specification.

The criticism of claim 10 is urged to be directed to breadth of scope and not indefiniteness. As such, the rejection improperly attempts to limit the scope of the claims by requiring additional limitations under the guise that such limitations are necessary to make the claims definite.

It is submitted that when the claim language is read in light of the specification, an artisan would readily understand the metes and bounds of the invention. Therefore, it is believed that claim 10, as amended, is definite and it is respectfully urged that the rejection of claim 10 as being indefinite be withdrawn.

Similar argument applies to the Examiner's contention that "thinner font line" in claim 14 is unclear. Therefore, it is believed that claim 14 is definite and it is respectfully urged that the rejection of claim 14 under 35 U.S.C. § 112, second paragraph, as being indefinite also be withdrawn.

REJECTION OF CLAIMS UNDER 35 U.S.C. § 102 AND § 103

I. Claims 1-9 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Osaka et al. (U.S. Patent 6,023,277).

To expedite prosecution, claims 1 and 2 have been amended to recite, *inter alia*:

...said control information includes the number of viewpoints for said three-dimensional image and at least one of i) a direction of thinning during generation of said three-dimensional image from said two-dimensional image, ii) image arrangement of said two-dimensional images corresponding to parallax images, and iii) reversal information on each of said parallax images

Osaka et al. neither discloses or suggests that the control information includes the number of viewpoints for said three-dimensional image and at least one of:

i) a direction of thinning during generation of said three-dimensional image from said two-dimensional image,

ii) image arrangement of said two-dimensional images corresponding to parallax images,
and

iii) reversal information on each of said parallax images.

Consequently, amended independent claims 1 and 2 are patentable over Osaka et al., as are dependent claims 3-9.

II. Claims 10, 11 and 14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Osaka et al. in view of Iizuka et al. (U.S. Patent 6,657,655), and further in view of Akamatsu et al. (U.S. Patent 6,313,866) and Ellson et al. (U.S. Patent 5,805,783).

As a first issue, it is noted that Ellson et al. (U.S. Patent 5,805,783) does not appear in any PTO 1449 or PTO 892. Consequently, it is respectfully requested that the Examiner provide a PTO 892 in the next communication having Ellson et al. (U.S. Patent 5,805,783) listed.

The rejections of claims 10, 11 and 14 are respectfully traversed.

The Examiner admits that Osaka et al., Iizuka et al. and Akamatsu et al. do not disclose “the generation unit generates the three-dimensional image by making bolder a line of a font image corresponding to said character information when generating the three-dimensional image from said character image” (claim 10), “said generation unit generates three-dimensional image data from two-dimensional image data obtained through synthesis by said second synthesis unit, instead of said two-dimensional images or character information” (claim 11) and “a first font

image and a second font image corresponding to the character information are provided, said second font image having a thinner font line than that of said first font image, said first font image is used when the character information is three-dimensionally displayed and said second font image is used when the character information is two-dimensionally displayed” (claim 14).

The Examiner has relied upon column 1, lines 44-55 of Ellson et al. as disclosing these features.

However, column 1, lines 44-55 describes:

...With the increasing popularity of computer graphics, text is more often rendered in three dimensions. A trivial extension of the use of fonts into the third dimension would be as texture maps. For example, a font could be used to typeset a page of a document, and then the text could be mapped as a texture onto a curved surface. While this puts text into a three-dimensional environment, the text itself does not have any three-dimensional character. The next level of extension of the text into three dimensions adds a thickness to all font characters. The fonts are still stored as two-dimensional objects, but by the definition of a thickness, the data can be converted into three dimensions...

What Ellson et al. is saying in this Description of the Related Art is that fonts in a two-dimensional environment can be placed in a three-dimensional environment by, for example, mapping the text as a texture onto a curved surface. This adds a thickness (the third dimension) to all font characters. However, what is not disclosed or suggested in Ellson et al. is that the three-dimensional image is generated by ***making bolder a line of a font image corresponding to said character information*** when generating the three-dimensional image from said character image. Making a font character thicker does not mean ***making bolder a line of a font image***.

What is also not disclosed or suggested in Ellson et al. is that when a first font image and a second font image corresponding to the character information are provided, the second font image has a thinner font line than that of the first font image, the first font image is used when

the character information is three-dimensionally displayed and the second font image is used when the character information is two-dimensionally displayed.

Consequently, claims 10, 11 and 14 are patentable over Osaka et al., Iizuka et al., Akamatsu et al. and Ellson et al., considered alone or in combination.

To expedite prosecution, claim 14 has been amended to be in independent form including all the limitations of base claim 12 and intervening claim 13.

III. Claims 12, 13 and 15-21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Osaka et al. in view of Iizuka et al. (U.S. Patent 6,657,655), and further in view of Akamatsu et al. (U.S. Patent 6,313,866).

The rejection is moot as to canceled claims 12 and 13. Claims 15-21 depend directly or indirectly from amended claim 14, which is patentable over Osaka et al., Iizuka et al., Akamatsu et al. and Ellson et al. Consequently, claims 15-21 are patentable over Osaka et al., Iizuka et al., Akamatsu et al. and Ellson et al. also.

IV. In view of the above, the allowance of claims 1-11 and 14-21, as amended, is respectfully solicited.

Application No. 10/512,056
Amendment date June 18, 2007
Reply to Office Action of March 19, 2007

Docket No.: 0033-0959PUS1

CONCLUSION

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Edward J. Wise (Reg. No. 34,523) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

Dated: June 19, 2007

Respectfully submitted,

By 

Charles Gorenstein

Registration No.: 29,271

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant